



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,851	03/18/2004	Shinsuke Toyomasu	250560US0	5866

22850 7590 07/24/2008
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MESH, GENNADIY

ART UNIT	PAPER NUMBER
----------	--------------

1796

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

07/24/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/802,851	Applicant(s) TOYOMASU ET AL.	
	Examiner GENNADIY MESH	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-9 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's Amendment filed on April 11, 2008 is acknowledged.

Claims 3-6 and 10-16 are canceled by Applicant. Claims 1-2 and 7-9 are withdrawn.

Rejection is maintained as it was set forth in previous Office action mailed on January 11, 2007 but altered due to Amendment.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi et al.(JP 05-117334) in view of Arakawa et al.(US 5,213,852) and in further view of information admitted by Applicant (see Specification, page 2,second paragraph).

Regarding Claims 17-19 Satoshi discloses identical basic copolymer as Component A (see Abstract, Formula (I) and (III) , page 1) and teaches that this copolymer has excellent transparency, thermal resistant and surface hardness (see [0001] and [0019].

Satoshi further discloses that this copolymer as many others, including styrenic polymers (see [022-023]) could exhibit negative apparent (at stressed state) birefringence - what was expected by theoretical calculation based on optical properties (see paragraph [0026],page 3 and Example 2).

Same art also discloses that blend of two different polymers (see paragraph [0022],page3) will exhibit intermediate resultant birefringence.

Note, that Satoshi point out that styrene contain polymers have negative birefringence, but silent about blending acrylonitrile-styrene copolymers with N-phenyl – substituted copolymer.

However, Arakawa discloses (abstract, lines 20-40,column 3) acrylonitrile-styrene basic copolymer, identical to Applicant's component B and teaches that this copolymer, has a **negative intrinsic birefringence** and can be blend (see line 5-20,column 9) with other polymers (even with polymers having positive birefringence) in order to obtain oriented stretched optical film **exhibiting negative birefringence and retardation** due to specific relation between refractive indexes.(see lines 45 – 60,column 5). Arakawa also pointing out that **biaxially** stretched polystyrene film exhibits **negative birefringence**. (see column 2,line 49-52).

Therefore , it would have been obvious to one of ordinary skill in the art at the time of the invention blend component A disclosed by Satoshi and component B per teaching of Arakawa, in order to obtain optical film exhibiting negative birefringence and having excellent thermal resistant and surface hardness (due to presence of component A in the composition).

Note, that Satoshi and /or Arakawa teach blending of Component A or Component B with other polymers if they produced transparent composition (see Satoshi [0022] or Arakawa column 9,lines 5-20), but are not specific about ratio between components a and B.

However, Applicant wrote - see page 2, second paragraph of the Specification “ It is known that with respect to maleimide based copolymers, a copolymer comprising a phenylmaleimide residual group and an α -olefin residual group exhibits **thermodynamic miscibility** within a specific proportion range in a blend with a copolymer comprising a styrene residual group and an acrylonitrile residual group (see, for example, U.S. Patent No. 4,605,700)”.

Note, that according U.S. Patent No. 4,605,700 discloses that blend of N-aryl substituted maleimide/ $C_2 - C_4$ α -olefin copolymer, having average molecular weight from about 5×10^4 to about 5×10^5 (Component A) and acrylonitrile-styrene copolymer or acrylonitrile- -butadiene- styrene terpolymer, wherein acrylonitrile presented in a range from 15% to about 35% by weight, having average molecular weight from about 7×10^4 to about 1.5×10^4 (Component B) produce thermodynamically stable(miscible) polymer composition in wide range : from about 99wt.% to 1 wt.% of Component A and from about 1wt.% to 99wt.% of Component B.

Therefore, one of ordinary skill in the art will be motivated to blend Components A and B due to miscibility in specific proportion in order to obtain composition with specific properties.

Regarding limitation of Claim 19: as substantially same, oriented film disclosed by Satoshi combine with Arakawa will have substantially same properties, including retardation ability.

Response to Arguments

2. Applicant's arguments filed on April 11, 2008 have been fully considered but they are not persuasive.

2.1. Applicant's arguments related to Claims 17-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi et al.(JP 05-117334) in view of Arakawa et al.(US 5,213,852) and in further view of information admitted by Applicant based on alleged deficiency of individual references : applicant stated that Satoshi and Arakawa fail to disclose optical film as claimed comprising components A and B in the claimed amount, film disclosed by Arakawa exhibits cracks and are brittle or have inferior heat resistance and Arakawa disclosed biaxially stretch film, but this film is different as claimed by Applicant (see page 9 of Arguments).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

As it was explained in rejection above (see paragraph 1) combination Satoshi with Arakawa combine with information admitted by Applicant teach or render obvious all elements of subjected matter claimed by applicant as biaxially stretched film, comprising same Components A and B in substantially same amounts.

Note, that because Arakawa discloses that **biaxially** stretch film exhibit **negative** birefringence can be combine with uniaxially stretched film exhibiting **positive**

Art Unit: 1796

birefringence in order to **obtained difference film with enhanced viewing angle** characteristics (see column 2, lines 35 - 55) one of ordinary skill will be motivated use this method with reasonable expectation of success.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. presence of cracks, brittleness or inferior heat resistance of the film) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For reasons above, all Applicant's arguments were found unpersuasive.

Conclusion

THIS ACTION IS MADE FINAL.

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GENNADIY MESH whose telephone number is (571)272-2901. The examiner can normally be reached on 10 a.m - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272 1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gennadiy Mesh
Examiner
Art Unit 1796

/GM/

/VASUDEVAN S. JAGANNATHAN/
Supervisory Patent Examiner, Art Unit 1796